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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,801	12/24/2003	George R. Bailey	215191.04100	9792

27160 7590 01/16/2007
PATENT ADMINISTRATOR
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EXAMINER

AHN, SAM K

ART UNIT	PAPER NUMBER
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2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/743,801		BAILEY, GEORGE R.	
	Examiner		Art Unit	
	Sam K. Ahn		2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 10, 14-20, 22, 27, 31-35, 37, 38 and 40 is/are rejected.
- 7) ☒ Claim(s) 4, 6-9, 11-13, 21, 23-26, 28-30, 36 and 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>090606, 122403</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3,5,10,14-20,22,27,31-35,37,38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nasuda US 6,115,588 in view of Partyka US 2001/0004375 A1 (Partyka).

Regarding claim 1, Nasuda teaches a system (system of Fig.1) for mitigating noise associated with information communication (mitigating noise affected by infrared-ray data communication, note col.2, lines 13-17), comprising:
a receiver (radio receiving section 2 in Fig.1) for receiving data (a selective call signal received via the receiver, note col.3, line 42; and control means (CPU, 10 in Fig.10) for temporarily suspending at least one process (inhibiting infrared-ray data communication, S102 in Fig.2 and note col.4, lines 7-11) and for continuing the at least one process after the data has been received by the receiver (see Figs. 3B for radio communication and 3C for IR communication wherein the at least one process or the IR communication is processed when radio communication is idle and IR communication is inhibited when radio communication is processed, hence after the second set of information received in Fig.3B – the second pulse of going low to high then to low, Fig.3C illustrates

wherein the IR communication is resumed), wherein the at least one process (the IR communication) produces noise that interferes with an integrity of the data received by the receiver (the boosting circuit for IR communication produces noise affecting the reception sensitivity of the radio communication, note col.1, lines 40-44).

However, Nasuda does not explicitly teach means for determining when a first set of information is transmitted by a transmitter, and the second set of information is received in response to the first set of information, wherein the control means suspends the at least one process between when the first set of information is transmitted and after receiving the second set of information.

Partyka teaches means for determining (636 in Fig.6) when a first set of information (see 702 in Fig.7 wherein the data comprises set of information) is transmitted by a transmitter (continuous data transmitted by the transmitter in Fig.2 according to the Time Data Memory 220), wherein the second set of information (752 in Fig.7) is received in response to the first set of information (the continuous data transmitted by the transmitter in Fig.2 is received as Data – fr #i~r by the receiver in Fig.6 according to the Time Memory Registers 636).

Hence, both Nasuda and Partyka teach a wireless system transmitting and receiving data wherein Partyka further teaches wherein the transmitter and the receiver in the system has a Time Memory Registers (note paragraph 0067), thus the system knows the next transmission predeterminedly. Hence, Partyka teaches faster acquisition and better tracking of the received signal can be

obtained through this implementation (note paragraph 0078). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the teaching of Partyka in the system of Nasuda by employing the Time Memory Registers in the respective transmitter and receiver for the purpose of faster acquisition and better tracking of the received signal can be obtained through this implementation (note paragraph 0078). As a result, one skilled in the art at the time the invention was made would recognize that, through the teaching of Nasuda in view of Partyka, during the time interval of the transmission of the first set of information (transmission of the continuous data of Partyka) and reception of the second set of information (reception during the second H level in Fig.3B of Nasuda) the control means (CPU, 10 in Fig.10) suspends the at least one process (inhibiting the IR communication, during the second L level in Fig.3C).

Regarding claim 2, Nasuda further teaches wherein the at least one process is associated with receiver noise (the boosting circuit for IR communication produces noise affecting the reception sensitivity of the radio communication receiver, note col.1, lines 40-44).

Regarding claim 3, Nasuda further teaches wherein the at least one process associated with receiver noise comprises a supply of power to the receiver (the

boosting circuit 18 in Fig.1 is used for boosting a voltage of the power supply to the receiver, note col.3, lines 34-40).

Regarding claim 5, Partyka teaches, as previously explained, wherein the transmitter transmits the first set of information (continuous data transmitted by the transmitter in Fig.2 according to the Time Data Memory 220).

Regarding claim 10, Partyka further teaches wherein the receiver (right side of Fig.7) receives at least one of a plurality of subsets of information (Sens, Bat Cnt...), wherein the plurality of subsets of information comprise the second set of information (752), and wherein the received plurality of subsets of information are combined (combined by the adder 758) to form the second set of information (752).

Regarding claim 14, Partyka further teaches means for processing (690 in Fig.6 processing Time Memory Registers 636) information associated with at least one of the transmitter and the receiver (the memory 636 stored with information regarding time of next transmission of a transmitter, note paragraph 0067).

Regarding claim 15, Partyka further teaches wherein the processing means (690 in Fig.6 processing Time Memory Registers 636) processes the second set of information (752 in Fig.7) after the second set of information has been received

by the receiver (validating the second set of information including the transmitter ID, note paragraph 0092).

Regarding claim 16, Partyka further teaches means for storing (636 in Fig.6 Time Memory Registers) information associated with at least one of the transmitter and the receiver (the memory 636 stored with information regarding time of next transmission of a transmitter, note paragraph 0067).

Regarding claim 17, Nasuda teaches, as previously explained, temporarily suspending at least one process associated with at least one of transmitter noise and receiver noise (inhibiting infrared-ray data communication, S102 in Fig.2 and note col.4, lines 7-11, the boosting circuit for IR communication produces noise affecting the reception sensitivity of the radio communication receiver, note col.1, lines 40-44).

However, Nasuda does not explicitly teach the information associated with at least one of the transmitter and the receiver is retrieved from the means for storing information.

Partyka teaches the information associated with at least one of the transmitter and the receiver is retrieved from the means for storing information (the memory 636 stored with information regarding time of next transmission of a transmitter, note paragraph 0067, and validating the second set of information including the transmitter ID, note paragraph 0092).

Hence, both Nasuda and Partyka teach a wireless system transmitting and receiving data wherein Partyka further teaches wherein the transmitter and the receiver in the system has a Time Memory Registers (note paragraph 0067), thus the system knows the next transmission predeterminedly. Hence, Partyka teaches faster acquisition and better tracking of the received signal can be obtained through this implementation (note paragraph 0078). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the teaching of Partyka in the system of Nasuda by employing the Time Memory Registers in the respective transmitter and receiver for the purpose of faster acquisition and better tracking of the received signal can be obtained through this implementation (note paragraph 0078). As a result, one skilled in the art at the time the invention was made would recognize that, through the teaching of Nasuda in view of Partyka, during the time interval of the transmission of the first set of information (transmission of the continuous data of Partyka) and reception of the second set of information (reception during the second H level in Fig.3B of Nasuda) the control means (CPU, 10 in Fig.10) suspends the at least one process (inhibiting the IR communication, during the second L level in Fig.3C).

Regarding claim 18, the claim is rejected as applied to claim 1 with similar scope.

Regarding claim 19, the claim is rejected as applied to claim 2 with similar scope.

Regarding claim 20, the claim is rejected as applied to claim 3 with similar scope.

Regarding claim 22, the claim is rejected as applied to claim 5 with similar scope.

Regarding claim 27, the claim is rejected as applied to claim 10 with similar scope.

Regarding claim 31, the claim is rejected as applied to claim 14 with similar scope.

Regarding claim 32, the claim is rejected as applied to claim 15 with similar scope.

Regarding claim 33, the claim is rejected as applied to claim 16 with similar scope.

Regarding claim 34, the claim is rejected as applied to claim 17 with similar scope.

Regarding claim 35, the claim is rejected as applied to claim 2 with similar scope.

Partya further teaches means for determining (636 in Fig.6) when a first set of information (see 702 in Fig.7 wherein the data comprises set of information) is communicated (continuous data transmitted by the transmitter in Fig.2 according to the Time Data Memory 220).

Regarding claim 37, the claim is rejected as applied to claim 2 with similar scope. The further limitation that the noise is a receiver noise is also taught by Nasuda (the boosting circuit for IR communication produces noise affecting the reception sensitivity of the radio communication receiver, note col.1, lines 40-44).

Regarding claim 38, the claim is rejected as applied to claim 35 with similar scope.

Regarding claim 40, the claim is rejected as applied to claim 37 with similar scope.

Allowable Subject Matter

2. Claims 4,6-9,11,12,13,21,23-26,28,29,30,36 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
3. The following is a statement of reasons for the indication of allowable subject matter: present application discloses a wireless system temporally stopping an operation related to delivering power supply to a receiver, as this creates noise from properly receiving wireless signals. Prior art teaches or suggests in combination of all the limitations claimed. However, prior art does not explicitly teach energy storage used for powering the receiver when the temporally stopping of the operation is executed

as recited in claims 4 and 21. Prior art further do not explicitly teach a controller temporally suspending of a process associated with transmitter noise during a time interval of transmission of first information and reception of second information, as recited in claims 6,23,36 and 39. Prior art further do not explicitly teach receiving information between noise peak intervals of an uncontrollable determined process which has an absence of association with the receiver, as claimed in claims 11-13 and 28-30.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Masahiro US 6,055,440 teach wireless device with suspension of a process during operation.

Sculley US 6,084,439 teach peak detection within an extended input voltage range for detecting peak voltage in a digital system.

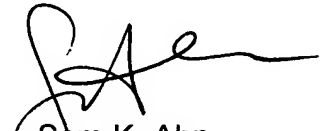
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Ahn whose telephone number is (571) 272-3044. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

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Sam K. Ahn
Patent Examiner

12/28/06